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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,274	01/04/2002	Jeffrey Allen Sturgill	UVD 0280 PA	6551

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Dayton, OH 45402-2023

EXAMINER
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SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,274

Applicant(s)

STURGILL ET AL.

Examiner

John P. Sheehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-8,10-48,123,124,126-128,130-132,135-148 and 151-154 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 152-154 is/are rejected.
- 7) ☒ Claim(s) 13 and 16-48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/21/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 123, 124, 126 to 128, 130 to 132, 135 to 148 and 151 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- I. In claim 123, line 3 and claim 151, line 3, the meaning of the term "preparative agent" is not clear. It is not clear what a preparative agent is and what its function is.

- II. In claim 148, line 5, the metes and bounds of the term, "sparingly soluble" are not clear. It is not clear what level of solubility is encompassed by the term "sparingly soluble".

### ***Claim Interpretation***

3. In view of the use of the claim terminology, "optionally an oxidizer, optionally a preparative agent, and optionally a solubility control agent" (claim 123, lines 3 and 4, emphasis added by the Examiner), claims 123, 124, 126 to 128, 130 to 132, 135 to 140 and 143 to 147 do not require the presence of an oxidizer, a preparative agent nor a solubility control agent while claim 141 does not require the presence of a preparative

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agent or a solubility control agent and claim 142 does not require the presence of an oxidizing agent or a solubility control agent.

***Prior Art Rejection Employing Schreiber, US Patent No. 5,411,606***

4. Below in this Office action the Examiner rejects some of the claims in view of Schreiber. At first glance this rejection may appear to be the same as the rejection set forth in the Office actions mailed March 16, 2004 and February 17, 2005 based on the admitted known prior art. In each of those Office actions the Examiner relied exclusively on the description on pages 5 to 7 of applicants' specification as to what was generally taught by the 15 references listed on page 5 of the specification. However, the rejection set forth in this Office action is based specifically on Schreiber, which is one of the 15 references discussed on pages 5 to 7 of the specification. Further, it should be noted that USPN 5,411,606 to Schreiber is not listed in the last paragraph on page 6 of applicants' specification, therefore the discussion in the last paragraph on page 6 of the specification, involving the use of a vanadate or a tungstate, is not directed to Schreiber (USPN 5,411,606).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 to 8, 10 to 12, 14, 15, 123, 124, 126, 130 to 132, 135 to 148 and 151 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schreiver (US Patent No. 5,411,606, cited in the IDS submitted April 3, 2002).

Schreiver teaches a corrosion inhibiting conversion coating bath consisting essentially of a solvent, and a cobalt-III hexacarboxylate complex. The cobalt-III hexacarboxylate complex solution is formed by dissolving and reacting a metal carboxylate salt and a soluble cobalt-II salt to form the cobalt-III hexacarboxylate complex containing solution (column 2, line 67 to column 3, line 12). The metal carboxylate salt is used by Schreiver to prevent valence shift (column 6, line 60 to column 7, line 10) and therefore is considered to be encompassed by the valence stabilizer recited in applicants' claims. The resulting cobalt-III hexacarboxylate complex is considered to be encompassed by the claim language, "cobalt/valence stabilizer complex" recited in the instant claims. Schreiver teaches that the solvent for the coating bath is water (column 8, line 65 to 68) as recited in applicants' claim 124. Applicants also discuss Schreiver at page 5, line 27 to page 6, line 6 of their specification;

The following references describe conversion coating processes based on cobalt: PCT International Application Nos. WO 96/29,448, WO 98/51,841, WO 96/2 1,753, WO 93/05,198, and S. African Patent No. ZA 93/01,234 to Dolan; PCT International Application Nos. WO 96/05.335, WO 94/00,619, and European Patent Application Nos. EP 523,288, EP 458,020, EP 488,430, and U.S. Patent Nos. 5,873,953, 5,411,606, 5,378,293, 5,298,092, and 5,551,994 to Schreiver. These specifications use additives that they term "bath stabilizers." These chemical species are claimed to form more stable coordination bonds with cobalt(III) cations than with cobalt(II) cations in the aqueous conversion coating solution. Specifically, carboxylates, hydroxyalkyl amines

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(aminoalcohols, such as triethanolamine), or nitrito complexes are described in these specifications as being added to the bath to retain trivalent cobalt in solution and to stabilize concentrations during the coating process. These bath stabilizers only treat and extend the service life of the cobalt(III) in the conversion coating solution itself (emphasis added by the Examiner).

Applicants' admissions include the limitations of claims 1, 3 to 8, 10 to 12, 14, 15, 123, 124, 126, 130 to 132, 135 to 148 and 151. Applicants' admissions of the known prior art render the instant claims obvious, MPEP 2129.

With respect to the temperatures recited in claims 146 and 147, it is noted that these claims recite a temperature, but the temperature does not lend patentability to the claimed composition, since the composition is acknowledged in applicants' admission as known and the temperature is merely an arbitrary property that does that effect the claimed composition.

Regarding the solubility limitation, "sparingly soluble" recited for example in claims 148 and 151, it is the Examiner's position that, in view of the 112 rejection set forth above the language, "sparingly soluble" does not distinguish over Schreiber.

With respect to the properties recited in claims 3 to 7, 12 and 140 to 143, including solubility, the electrostatic barrier, the ion exchange property, the thickness of the coating (i.e. the coating resulting from the contact with the substrate), the cavity containing cobalt and an additional ion are all inherent properties necessarily present from the presence of the same claimed chemicals, namely the trivalent cobalt complex that has been combined with a ligand (i.e. a valence stabilizer), In re Best, 195 USPQ, 430 and MPEP 2112.01.

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"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

### ***Allowable Subject Matter***

3. Claims 152-154 are allowed.
4. Claims 13 and 16 to 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

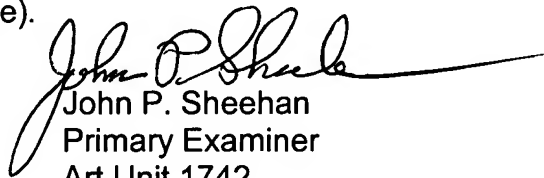
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742

jps